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60. (new) The composition of Claim 58 or 59 which comprises a monoclonal antibody or fragment thereof.

61. (new) The composition of Claim 58 or 59 which comprises a recombinant antibody or fragment thereof.

62. (new) The composition of Claim 58 or 59 which comprises a chimeric antibody or a CDR-grafted antibody.

63. (new) The composition of Claim 58 or 59 which comprises a human antibody or fragment thereof.

64. (new) The composition of Claim 63 wherein the human antibody is prepared by the steps of immunizing a transgenic animal capable of producing human antibodies and recovering the human antibodies.

65. (new) The composition of Claim 58 or 59 wherein the antibody or fragment binds to an epitope on an extracellular domain of an osteoprotegerin binding protein or to an epitope on a fragment of an extracellular domain of an osteoprotegerin binding protein.

66. (new) The composition of Claims 58 or 59 wherein the antibody or fragment binds to an epitope comprising at least part of amino acid residues 70-316 of Figure 1 (SEQ ID NO:37) or binds to an epitope comprising at least part of amino acid residues 69-317 of Figure 4 (SEQ ID NO:39), or binds to both.

67. (new) The composition of Claim 58 or 59 wherein the epitope comprises at least part of the BB' loop.

68. (new) The composition of Claim 58 or 59 wherein the epitope comprises at least part of the EF loop.

69. (new) The composition of Claims 58, 59, 60, 61, 62 or 63 further comprising a bone morphogenic factor selected from the group consisting of BMP-1 to BMP-12, transforming growth factor- β , a transforming growth factor- β family member, a fibroblast growth factor selected from the group consisting of FGF-1 to FGF-10, an interleukin-1 inhibitor, a TNF α inhibitor, parathyroid hormone, an E series prostaglandin, a bisphosphonate, or a bone-enhancing mineral.

70. (new) A composition comprising an antibody or fragment thereof which is present in an amount effective to inhibit bone resorption in a mammal, and a pharmaceutically acceptable diluent, carrier, solubilizer, emulsifier, preservative and/or adjuvant, wherein the antibody or fragment binds to an epitope of an osteoprotegerin binding protein and the antibody is produced by immunization with an osteoprotegerin binding protein comprising the amino acid sequence of Figure 4 (SEQ ID NO:39), a membrane associated form thereof, a soluble form thereof, or a fragment thereof.

71. (new) A composition comprising an antibody or fragment thereof which is present in an amount effective to inhibit bone resorption in a mammal and a pharmaceutically acceptable diluent, carrier, solubilizer, emulsifier, preservative and/or adjuvant, wherein the antibody or fragment binds to an epitope of an osteoprotgerin binding protein and the antibody is produced by immunization with an osteoprotegerin binding protein comprising the amino acid sequence of Figure 1 (SEQ ID NO:37), a membrane associated form thereof, a soluble form thereof, or a fragment thereof.

72. (new) The composition of Claim 70 or 71 which comprises a monoclonal antibody or fragment thereof.

73. (new) The composition of Claim 70 or 71 which is further modified to a chimeric antibody or a CDR-grafted antibody.

74. (new) The composition of Claim 70 or 71 which comprises a human antibody or a fragment thereof.

75. (new) The composition of Claim 74 prepared by the steps of immunizing a transgenic animal capable of producing human antibodies and recovering the human antibodies.

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76. (new) The composition of Claim 70 or 71 wherein the antibody or fragment is produced by expression of a nucleic acid encoding the antibody or fragment in a transformed or transfected host cell.

77. (new) The composition of Claim 70 or 71 wherein the antibody or fragment binds to an epitope on the extracellular domain or to an epitope on a fragment of the extracellular domain of an osteoprotegerin binding protein.

78. (new) The composition of Claim 70 or 71 wherein the antibody or fragment binds to an epitope comprising at least part of amino acid residues 70-316 of Figure 1 (SEQ ID NO:37) or binds to an epitope comprising at least part of amino acid residues 69-317 of Figure 4 (SEQ ID NO:39), or binds to both.

79. (new) The composition of Claim 70 or 71 wherein the epitope comprises at least part of the BB' loop.

80. (new) The composition of Claim 70 or 71 wherein the epitope comprises at least part of the EF loop.

81. (new) The composition of any of Claims 70, 71, 72, 73 or 74 further comprising a bone morphogenic factor selected from the group consisting of BMP-1 to BMP-12, transforming growth factor- β , a transforming growth factor- β family member, a fibroblast growth factor selected from the group consisting of FGF-1 to FGF-10, an interleukin-1 inhibitor, a TNF α inhibitor, parathyroid hormone, an E series prostaglandin, a bisphosphonate, or a bone-enhancing mineral.
